

CV Profile (max. 2 pages length)

Name: Dr. Ashwinikumar Sharma

Brief introduction about yourself (including your research interests)

Researcher with more than five years of academic and industrial research experience in product development and innovation of TPEs/TPE-U/TPE-A class of elastomeric polymers with a specialization in synthesis and characterization techniques. Aspiring to incorporate experience and acquired skills towards designing and fabricating novel elastomeric or thermoplastic polymers for potential applications. My research area includes engineering polymers, polymers for bio-medical application, structure property relationship, rheology, thermal and mechanical properties of elastomeric polymers. I am married and the father of a son (15 months old).

Education

Please list the **name** of each imparted programme with its corresponding **dates**.

PhD: Name of PhD programme (dd/mm/yyyy- dd/mm/yyyy)

Marie Skłodowska-Curie Innovative Training Network (September 2014 - June 2019)

Master's degree: Name of master's degree (dd/mm/yyyy- dd/mm/yyyy)

Master of Science (Polymer Science) (June 2008 - June 2010)

Undergraduate degree: Name of Undergraduate Degree (dd/mm/yyyy- dd/mm/yyyy)

Bachelors of Science (Chemistry) (June 2005 - June 2008)

Experience in research

Please list in **reverse** order. Indicate **responsibility** and the performed **activities**. Indicate also the **dates and number of months** of each activity.

IMPORTANT: Management and teaching activities are not considered as research experience.

“Synthesis and thermo-rheological properties of thermoplastic elastomers (TPE’s) based on hydrogen bonded hard segments (HS)”.

Sep. 2014 – Jun. 2019

Ph.D. thesis at UCLouvain in collaboration with DSM B.V. Netherlands.

1) Designed and executed experiments for synthesis of well-defined TPE’s (100 g. batch) based on ester-amide chemistry using lab scale industrial setup. (April 2014 - September 2017).

2) TPE’s were chemically modified to understand the effect of this on microstructure development to enhance the understanding of the structure-property relationship.

3) Experience in monomer synthesis and purification using experimental techniques.

4) Good understanding of supramolecular chemistry, experimental techniques, data evaluation and project management.

5) Analyzed and correlated high-temperature stability, temperature independent plateau modulus, low-temperature flexibility and processability to microstructure, chemical composition, thermal history and processing conditions.

6) Hence, the systematic study offered the possibilities of engineering these materials for manufacturing car parts and insulating charging cables, where durability and elasticity are important aspects.

PS - Exact dates and number of months are difficult to mention as multiple projects/sample analysis were done.

Sector of activity

Please write the sector name in which your research/knowledge can be useful (food, mobility, health...):

Material Science or Engineering Polymers

Select the option/s about your profile

To be admissible for the call, you must fulfil **at least one** of the two requirements.

PhD and a minimum of 2 additional years of full-time research experience (*the 2 minimum additional years of full-time research must be done after the PhD*): Yes or No

Yes

No

Master’s degree and a minimum of 6 additional years of full-time research experience (*PhD studies are considered research experience*): Yes or No

Yes

No

Contact information

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